133 505 The three channels are traditionally named the God, the Ghost, and the Man. From these names it can be readily seen that boatmen have been finding safe passage only through the last channel. As the river flows farther eastward to reach the edge of the region at Yüan-ch'ü, the current eases somewhat to a more hospitable flow. 5/

133 504 3. Coastline: This region's limited coastline opens to the Gulf of Po-hai. Because it is on the fringe of an alluvial plain, its potentiality for seaports is limited unless extensive dredging is done. Chinwangtao was formerly the only natural port, but it was handicapped by its position which required a long overland haul for cargoes passing through this port. However, the fact that it is almost completely ice-free adds to its value. 6/ The completion ofthe Tangku New Harbor (October 17, 1952) improves considerably the position of Tientsin as the most important port in this region. Described a major man-made harbor, the New Harbor encompasses a 20-square-kilometer (7.7 sq. mi.) body of water, complete with two breakwaters, 20 kilometers (18.6 mi.) long altogether, designed to accommodate vessels up to 10,000 tons. 7/

5/ Ibid.

6/ George B. Cressey, China's Geographic Foundations, New York, McGrow-Hill, 1934, p. 177; Ch'u Shao-t'ang, Hsin Chung-kuo Ti-li [The Geography of New China], Shanghai, Ta Chung-kuo t'u-shu-chü, 1953, p. 61.

7/ Atlas of the People's Republic of China by Province, Shanghai, T'i-t'u ch'u-pan-she, 1953.

turies by the Han Chinese and Mongols. Southward from Peking, the Peking Hankow Railway provides ready access to a number of key cities in Hopei and other provinces in central China. These key cities include Paoting, which was the site of the Hopei provincial capital until it was moved to Shihchiachuang in 1954, to the south on the same rail line. Shihchiachuang is a communication center with railways and highways that reach most of the region. Both Han-tan and Hsinhsiang are important cities on the Peking-Hankow Railway; the latter is more and more frequently mentioned in the press because of the growing industrial center at the nearby city of Chiao-tso.

Tientsin as a treaty port has a history dating back to 1860. The extensive inland waterway system that connects Tientsin with many areas in northern Hopei Province adds to the city's commercial value. Completion of the New Harbor at Tangku on October 17, 1952 further enhanced the position of Tientsin by bringing sea-going vessels up to 3,000 tons directly to Tientsin.[12] The Tientsin-Pukow (P'u-k'ou) Railway is the artery of transportation in eastern Hopei Province. On this railway are located such key cities as Tehsien (or Te-chou) and Ts'ang-hsien. There is also a railway connecting Tientsin with Shanhaikuan to the north. Just before reaching Shan-

---

[12] Wang Kuang, Chung-kuo Hai-chiang Chih [The Bays and Harbors of China], Taipei, Chung-hua wen-hua ch'u-pan shih-yeh wei-yüan-hui, 1954, p. 58.

haikuan the railway passes through Chinwangtao, an ice-free port which has been the main outlet for coal extracted from the Kailan Mine at Tangshan. Shanhaikuan is the eastern terminal of the Great Wall. Between the Wall and the seashore there is an opening of only about five miles. Through this gateway once passed expeditionary troops to the northeastern territories and invasion armies from without.

In Shansi Province all roads lead to the provincial capital of Taiyuan. A short distance to the south of Taiyuan, the Shihchiachuang-Taiyuan Railway from the east connects with the Ta-t'ung --P'u-ch'eng Railway which runs vertically through the province and passes Taiyuan. The Fen River on the west side of Taiyuan is not navigable on this stretch. In the city of Taiyuan there are relatively well-developed iron, steel, and chemical industries.

Ta t'ung is the northernmost communication center in Shansi Province. It has convenient acess to the key points in Hopei Province via the Peking--Pao-t'ou Railway, and it also has direct railway connection with Inner Mongolia.

From Taiyuan southward one can travel on the main railway in Shansi Province to reach the important cities located in the Fen River Valley, the southernmost of which is Feng-ling-tu. Feng-ling-tu guards the southwestern approach to the region. Across the Yellow River it faces the famous city of T'ung-kuan in Shensi Province. If

1:Stanford U. S-4, 5 1956 AF12 North China
~~AF12~~ AF 12

504 North China's twc principal harbors are Tangku New Harbor, about 45 kilometers (28 mi.) from Tientsin at a point where the Hai River meets the sea, and Chinwangtao Harbor. The construction of Tangku Harbor was begun by the Japanese during the Sino-Japanese War, continued by the Nationalist Government, and completed by the Communists in 1949. The harbor can accomodate ships up to 10,000 tons; prior to its completion, ships of more than 3,000 tons with cargo for Tientsin had to anchor 30 miles away, and freight was transferred to and from the docks by flat-bottomed boats. Today, the harbor is equipped with floating cranes, automatic coal-loaders, and other modern equipment, and there are shipyards, railway yards, and warehouses at hand. A single wharf can handle four 10,000-ton ships and five 3,000-tons vessels at one time.[21] Construction continues. The harbor at Chinwangtoa is the only year-round ice-free harbor in North China. Coal from the mines at Kailan are shipped from Chinwangtao to Tientsin and the East China ports.

---

21. People's China, Jan. 16, 1953, p. 32.

439 Significance of the New Tangku Harbor

439 504 The lifting of the Nationalist blockade, although incomplete, has removed an important cause contributing to the relative importance of Tientsin in China's foreign trade during the initial period of Communist rule. However, another factor has come into play and has more than compensated for the loss of the special advantage afforded by the port at Tientsin. This is the opening of the new Tangku harbor.

Work on the new harbor at Tangku was begun by the Japanese. Efforts were made by the Nationalists to continue construction at the close of World War II. Following the Communists' occupation of North China, construction work was resumed in August 1951. The original plan aimed at thecompletion of the first phase of construction by the end of 1952. According to a Communist report, the actual completion date was advanced to October 17, 1952.[9] The new harbor has a main navigation channel 15.2 kilometers (9.44 mi.) long, 60 meters (196.8 ft.) wide, and about 6.5 meters (21.32 ft.) in depth (10 meters at high tide). The Communist report says that 10,000-ton ocean-going ships can now be docked. Rail spurs at the harbor provide convenient connections with all the trunk lines in the Peking-Tientsin area, and connection with the five principal inland

---

9. Lin Li, op. cit., pp. 4-5.

waterways of the Hopei[10] plain is possible through the Hai River.

The opening of the harbor at Tangku has resulted in a sharp drop in freight costs by eliminating the need for rail trans-shipment from Dairen, which, until 1953, served as a major port of entry for bulky industrial equipment destined for construction projects in North China. According to a Communist report,[11] total shipping volume in 1953 at Tientsin (including the old and new harbors at Tangku and the Tientsin harbor) reached 300 per cent of the corresponding volume in 1949; an additional increase of 50 per cent was recorded in the first nine months of 1954 in comparison with the corresponding period in 1953. Parallel to the increase in shipping in 1953, the value of both exports and imports at Tientsin has risen. Apparently the increase during 1953, the first year that the new harbor at Tangku was in actual use, was so rapid that, on a monthly basis, Tientsin was accounting for 60 per cent of the country's total imports and 40 per cent of its total exports.[12] This trend probably continued during the following year.

---

10. Ibid.
11. Economic Bulletin, Dec. 31, 1954, p. 26.
12. Lin Li, op. cit. pp. 14-15.

8: Lin E-5 (1927)1928 AF12 North China AF12

ing the salt industry of this country.

In addition to the improvements of salt refining, the staff of the Research Institute has also worked out valuable results regarding the industrial uses of salt. Two industrial concerns, the Pacific Alkali Works and the Po Hai Chemical Works, may be said to be the offshoots of the Research Institute in that both are makiug use of the results of its research and are developing them along commercial lines.

It should be pointed out that the supply of crude salt produced in Tangku and its neighbouring districts has always been in excess of its demand. Take Hanku for an example. Its productive capacity per year has been 4,000,000 piculs, while only one-half of it is actually sold. The sheer waste attendant upon salt production in this country is certainly astonishing. It has also been estimated that 800,000 piculs of mother liquor, an important by-product of salt have been thrown away every year without any recognition of its value. If the Research Institute could continue to work on the industrial utilization of salt, as it has already done in making possible the establishment of the two companies—the Pacific Alkali Works and the Po-Hai Chemical Works—it would not only help solve the problem of turning to good account the enormous amount of salt which would otherwise be wasted, but also confer an enormous benefit on ihe multitudes of salt producers throughout China by giving them livelihood.

The town of Tangku has experienced during the last thirty years several vicissitudes. The year 1898 marked the beginning of a phenomenal growth, for in that year the riverway leading from it to Tientsin was blocked by silting to such an extent that steamers of over one thousand tonnage had to lay anchor at Tangku where loading and unloading of goods were effected. The town at once found itself flourishing and prosperous, for what had been originally a mere outer port now became the only important gateway of North China. In 1900, however, came the Boxer Uprising. Being the main entrance to Tientsin and Peking,[1]

[1] Now changed to Peiping by order of the Nationalist Government.

8: Lin E-5 (1927)1928 AF12 North China AF12

the town was the first to suffer from the heavy cannonading of foreign troops. It was practically demolished by gun-fire and the inhabitants of Tangku had to flee for their lives and seek refuge in distant villages. In fact, what they had saved were only their lives, for whatever they had, homes as well as properties, were either pillaged or destroyed. Then the French, Japanese, German and Russian troops seized huge tracts of land along the river for the building of barracks to house their garrisons. Except the Germans and Russians, the French and Japanese hava retained possession of the land ever since. In the meantime, the port of Tientsin again became accessible to ocean-going steamers. In those years, the town of Tangku suffered a decline from which it has never recovered. The appearance of the Chiu Ta Factory, however, has contributed greatly to the development of Tangku. At least in its immediate neighhourhood, roads and bridges have been built and an electric plant installed by the Factory. Towards education, police and welfare work, it has also contributed its share. It is no exaggeration to say that the Chiu Ta Factory has been a civilizing influence in this once decrepit town and it has promoted its material as well as spiritual progress. In the summer of 1927, the river route to Tientsin wos again blocked by silt and Tangku has once more become the port where goods and passenger traffic to and from Tientsin must pass through.

II. WORKERS OF THE CHIU TA FACTORY

Classification of Workers.—The workers of the Chiu Ta Factory fall into two classes, common labourers and skilled labourers. The latter may be further distinguished as (1) skilled labourers, (2) semi-skilled labourers and (3) apprentices. The skilled labourer has been trained either in the factory or in some other place. The semi-skilled labourer is generally recruited from among common labourers, but he is required to assist in skilled work. He is accorded the same treatment as the common labourer, only his wage is increased more frequently; and being engaged in more or less skilled work, he could gain knowledge